CLAIMS:

1. A separator for a fuel ~~battery~~ cell in which fuel gas and oxidizing agent gas are used as reaction gases, comprising a flat plate arranged to form a reaction chamber, a plurality of projections projected from the flat plate and retained in contact with an electrode plate of the fuel ~~battery~~ cell, wherein the projections are made of a different kind of conductive material independently from the flat plate.

2. A separator for a fuel ~~battery~~ cell as claimed in Claim 1, wherein the projections are made of carbon.

3. A separator for a fuel ~~battery~~ cell as claimed in Claim 1, wherein the flat plate is in the form of an insulation plate.

4. A separator for a fuel ~~battery~~ cell as claimed in Claim 1, wherein the flat plate is made of synthetic resin.

5. A separator for a fuel ~~battery~~ cell as claimed in Claim 1, wherein the flat plate is in the form of a conductive plate.

6. A separator for a fuel ~~battery~~ cell as claimed in Claim 5, wherein the flat plate is made of synthetic resin containing carbon.

7. A fuel ~~battery~~ cell composed of at least a cell function assembly comprising an electrolytic membrane, a pair of electrode plates in contact with opposite surfaces of the electrolytic membrane, a first separator placed in contact with one of the electrode plates to form a reaction chamber supplied with fuel gas, a second separator placed in contact with the other electrode plate to form a reaction chamber supplied with oxidizing agent gas, and a set of current-collecting plates assembled respectively in contact with the first separator at an outermost side of the cell function assembly and the second separator at another outermost side of the cell function assembly, wherein the separator claimed in Claim 3 ~~or 4~~ is used as the first and second separators.

8. A fuel ~~battery~~ cell as claimed in Claim 7, wherein the current-collecting plates each are divided into a plurality of spaced plates.

9. A fuel ~~battery~~ cell as claimed in Claim 7, wherein the electrode plates each are divided into a plurality of spaced plates, and wherein the current-collecting plates each are divided into a plurality of spaced plates.

10. A fuel ~~battery~~ cell composed of at least a cell function assembly comprising an electrolytic membrane, a pair of electrode plates in contact with opposite surfaces of the electrolytic membrane, a first separator placed in contact with one of the electrode plates to form a reaction chamber supplied with fuel gas, a second separator placed in contact with the other electrode plate to form a reaction chamber supplied with oxidizing agent gas, and a set of current-collecting plates assembled respectively in contact with the first separator at an outermost side of the cell function assembly and the second separator at another outermost side of the cell function assembly, wherein the separator claimed in Claim 5 ~~or 6~~ is used as the first and second separators.

11. A manufacturing method of a separator for a fuel ~~battery~~ cell claimed in Claim 4 ~~or 6~~, comprising a first process of pressing carbon powder to form the projections, a second process of coating a sealing adhesive agent on a flat plate of synthetic resin, and a third process of assembling the projections with a plurality of mounting holes formed in the flat plate and securing the projections in position.

12. A manufacturing method of a separator for a fuel ~~battery~~ cell claimed in Claim 4 ~~or 6~~, comprising a first process of heating carbon powder containing a binder under pressure to form the projections, a second process of coating a sealing adhesive agent on a flat plate of synthetic resin, and a third process of assembling the projections with a plurality of mounting holes formed in the flat plate and securing the projections in position.

13. A manufacturing method of a separator for a fuel ~~battery~~ cell as claimed in Claim 12, wherein the projections are heated by an electric current to melt the binder contained therein and hardened by cooling.

14. A manufacturing method of a separator for a fuel ~~battery~~ cell claimed in Claim 4 ~~or 6~~, comprising a first process of pressing carbon powder containing a

binder to form the projections, a second process of assembling the projections with a plurality of mounting holes formed in a flat plate of synthetic resin, and a third process of heating the projections by an electric current to melt the binder contained therein and cooling the projections to harden them in position.

15. A manufacturing method of a separator for a fuel ~~battery~~ cell claimed in Claim 4 ~~or 6~~, a first process of pressing carbon powder to form the projections under pressure, a second process of coupling the projections within corresponding recesses formed in each cavity of molding dies and clamping the dies, and a third process of injecting melted synthetic resin into the cavity of the molding dies in a clamped condition.

16. A manufacturing method of a separator for a fuel ~~battery~~ cell claimed in Claim 15, wherein carbon powder containing a binder is heated under pressure to form the projections.

17. A manufacturing method of a separator for a fuel ~~battery~~ cell claimed in Claim 4 ~~or 6~~, comprising a first process of filling carbon powder containing a binder in a plurality of upward recesses formed in a lower molding die in such a manner as to correspond with the projections, a second process of positioning a flat plate formed with a plurality of through holes on the lower molding die in such a manner that the through holes of the flat plate are opposed to the upward recesses of the lower molding die and positioning an upper molding die formed with a plurality of downward recesses on the flat plate so that the downward recesses of the upper molding die are opposed to the upward recesses of the lower molding die, and a third process of pressing the carbon powder filled in the upward recesses of the lower molding die toward the upper molding die by means of pressure means disposed in each bottom of the upward recesses so that the projections are formed across the through holes of the flat plate, of heating under supply of an electric current to melt the binder contained in the projections and of cooling the projections to harden them in position.